July 17, 2002

MODIS sensor Working Group (MsWG) Summary

Attendance: Bob Barnes, Stuart Biggar, Roger Drake, Wayne Esaias, Bob Evans, Shaida Johnston, Chris Moeller, Hassan Quaidrari, Vince Salomonson, Junqiang Sun, Gary Toller, Jack Xiong, Eric Vermote, Zhengming Wan, Joe Esposito

---

Scheduled Items

Item 1 Terra MODIS Status

JX) No changes, Terra is stable. Still getting formatter errors.

Item 2 Aqua MODIS Status

06/27 - 07/03: Data loss due to S/C safe hold

07/03 - 07/08: Data with different Itwk/Vdet (102/136)

07/08 – present: Back to normal Itwk/Vdet (102/184)

JX) Currently Aqua/MODIS is in nominal configuration (Bside, Itwk/Vdet (102/184).

B6 detectors' operability issue

JX) Two additional detectors are dead for Itwk/Vdet (102/136) for 07/03-07/08/2002 however the detectors are working for Itwk/Vdet (102/184) since 07/08/2002. Also, detector 11 (SBRS order) has become functional. MCST recommends that all candidate bad detectors be flagged as Dead (added to dead detector LUT) for the preliminary processing. The detectors that are believed to be good can be taken off the dead detector list later during reprocessing.

SRCA data analyzed (spatial data processed)

JX) Full spatial has been processed. BBR went back to that of TV3.

RD) Maximum miss-registration is 0.3km. The VIS-NIR registration-registration is less than 0.1km and the SWMIR-LWIR registration-registration is less than 0.1km. The additional 0.2km is between the cold FPAs and the warm FPAs. VIS-NIR and SWMIR-LWIR is near to TV2.

Aqua LUT update plan

JX) Calibrations were performed successfully on June 13 (2002164), June 16 (2002167), and July 4 (2002185). Safe Mode prevented calibration on June 29 and the Closed Mode (SDS closed) calibration failed on July 10 (2002191) [the commands to open the SDD were not received onboard]. The next calibration is scheduled for today, July 17 (2002198), and the data should be available on Friday. Today's calibration gives MCST two Baseline, NADIR closed, calibrations, one calibration (2002185) that had improper setting for Itwk/Vdet, and one calibration with nominal configuration settings (2002198) that can be used to generate a set of m1 LUTs for delivery to the DAAC (into production by late next week). [*MCST Action: send new LUTs to DAAC and Miami*]

Item 3 MCST Workshop Plan

JX) MCST will give 10-15 minutes for geo-location presentation
Terra update and future plans will be presented followed by Aqua initial on-orbit results and Terra-Aqua comparison. The MCST presentation will be roughly 1-1.5 hours. Additional items/issues and special topics can be discussed in the late

afternoon/evening. CD's will be handed out covering all presented materials. The CD contents will also be available at the MCST website. Since the MCST servers have recently changed, if problems occur contact me at: XiaoXiong.Xiong.1@gsfc.nasa.gov.

SB) PDF files require fonts for charts to be legible. Include PDF fonts with files on CD in order to avoid non-readable pages/graphics (*MCST Action: include fonts on CD files*).

Around the Table

Participant: Gary Toller

GT) Delivered Terra L1B to SDST on 7/15/2002 for Terra that should be delivered to GDAAC next week.
Saturation charts for Aqua like those currently available for Terra are available for viewing on the internet.

Participant: Eric Vermote

EV) Detector 1 (product order) in B7 is causing stripping. Would like to compare this with new, on-orbit, m1 values.

JX) Farida will compare the granule for the on-orbit coefficients and send charts of the results to you [*MCST Action: comparison of pre-launch to on-orbit LUT for B7 over a particular EV supplied granule time stamp*]

Participant: Chris Moeller

CM) Aqua B36 has a noisy detector (D5 product order) that would be best flagged as dead. Sent ppt files to MCST last week. There is a striping effect in B20 and B22. From pre-launch (RD) and on-orbit (CM) conclude that possible X-talk from B22 into B20 and B23 into B22 may be the cause.

JX) There may still be some X-talk in these bands on Aqua.

CM) Bob Evans may see this in his data analysis.

Participant: Bob Evans

BE) Detector 1 (product order) does not track like the other detectors for the VIS. Miami uses D2 for D1 when this occurs (Issue: D1 anomaly).

RD) *Bob to send data to Roger*

BE) Miami is analyzing V3-V4 for Aqua B31 and B32. Getting anomalously low SST, roughly 20% lower than expected (multiplier coefficient is lower than historically expected).

Participant: Stuart Biggar

SB) Arizona will need the granule data corresponding to RRV measurements [7/13/02].

JX) MCST will place the data on the MCST FTP site. MCST will also send Arizona mini-L1B program. [*MCST Action: place RRV granule data on MCST FTP site*]

Participant: Zhengming Wan

ZW) The current Aqua coefficients (a_0 and a_2) for B29 are pre-launch values and yield 0.5 degree and larger deviation from Terra. Z. Wan will send granule time stamp for MCST to compare pre-launch to on-orbit coefficients (a_0, a_2) [*MCST Action: compare effect of pre-launch to on-orbit coefficients on B29*]

No MsWG meeting next week due to STM
Next meeting July 31, 2002

Compiled by J. A. Esposito July 17, 2002